

# **TYPE 2222 ACTUATOR**

The Regulateurs Europa 2222 actuator is a proportional actuator in which the output shaft position is proportional to the electric input signal.

The actuator has many parts in common with our 1800 series hydraulic servo governor and like the 1800 hydraulic servo governor, it has a two stage high stiffness, backlash free hydraulic servo mechanism, enabling the best possible control to be obtained on engines having fuel control systems with large stiction forces.

A Booster unit can be supplied for application where minimal starting air consumption is required.



**TYPE 2222 ACTUATOR Series** 

# **FEATURES**

- 60 or 80 ft.lb f (81 or 108 Joules) work output within the same external dimensions, plus other common design features, give maximum application flexibility to suit all Prime Mover duties
- Drive speed, drive shaft, base mounting, common to both models
- Base adaptors and drive shafts available to suit mountings engineered for other manufacturers governors, these factors contribute to lower engine design and production costs.

# **TYPE 2222 ACTUATOR**

# **SPECIFICATION**

### **Actuator Drive Speed**

Speed range at rated engine speed - 900 to 1200 rev./min. Output shaft movement 40° (maximum) with 24° or greater to be used from No Load to Full Load.

#### **Stalled Work Capacity**

60 ft.lb f (81 Joules) 80 ft.lb f (108 Joules)

### Output Torque 90 lbf.ft (122Nm) 120 lbf.ft (163 Nm)

Servo Oil Pressure 200 lbf./in<sup>2</sup> (13.8 bar) 265 lbf./in<sup>2</sup> (18.3 bar)

Output is proportional to an input signal of 0 to 1 amp (nominal) 250 m A at position 2 (recommended working range) 750 m A at position 8 (recommended working range)

Open loop positional tolerance approximately ± 1.5% FSD

Note: The load on the actuator should not exceed 60% of the above stalled torque and work capacity figures to cover conditions when one or more fuel pumps are seized.

# Oil Supply

Self contained 4.25 litres

#### **Output Shaft Dimensions**

 $^{7}\!/_{\scriptscriptstyle 8}$  in. nominal diameter, 48 SAE Serrations, both sides of actuator.

#### **Drive Shaft Dimensions**

 $1/_{6}$  in. nominal diameter, 48 SAE Serrations, Standard. Alternatively  $5/_{6}$  in. nominal diameter with  $3/_{16}$  in. x  $3/_{16}$  in. Key.

#### Rotation

Either clockwise or counter-clockwise.

## Weight

114 lbs (52kg)

## Oil Cooler

An oil cooler may be required when operating in an ambient temperature in excess of 40°C.

Note: Oil Cooler to be mounted on governor. Cooling media can be fresh or salt water or engine oil providing latter does not exceed 50°C. Flow rate approximately 5 litres/min. water, 10 litres/min.oil.

Power to drive actuator (at 1000 rev/min Actuator Drive Speed)

60 ft.lbf. Work output -0.50 hp (0.37 kW) Input Torque 2.62 lbf. Ft. (3.54 Nm.) 80 ft.lbf. Work Output -0.75 hp (0.56 kW) Input Torque 3.5 lbf.ft. (4.74 Nm.)

#### **Regulateurs Europa**

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